

Justin Tsai

Area: Arcadia, CA 91007 | Phone: (626) 487-3437

Email: justintsai01@gmail.com | LinkedIn: [/in/justintsai01/](https://www.linkedin.com/in/justintsai01/) | Portfolio: <https://justin-tsai.github.io/>

WORK EXPERIENCE

CPP Virtual Reality Lab

Aug 2018 - May 2019

Administrator

- Led and managed groups of students to develop VR/AR projects for presentation to industry sponsors.
- Mentored students and hosted workshops and code reviews to teach basic Unity development.
- Redesigned the organization's web page while improving readability and responsiveness.

EDUCATION

California State Polytechnic University, Pomona

May 2019

Bachelor of Science, Computer Science

GPA: 3.5, Cum Laude

PROJECTS

Spellbreaker

May - June 2019

- Created a single player VR hack and slash game. The player has to cut through a flurry of magic projectiles aimed at them using their swords.
- Implemented game mechanics, audio, particle systems, and player controls.

Isolation

April 2019

- Created a player vs computer console game coded in Java. The player has to outmaneuver the computer by trapping it with previously made moves.
- Implemented a min-max algorithm utilizing alpha-beta pruning with iterative deepening that the computer uses as a heuristic to make its moves.

VR Wildfire

Sept 2018

- Enhanced and debugged an existing VR research project that simulates a scenario in which the user is caught in the middle of a wildfire to see what courses of action the user takes.
- Fixed errors by analyzing and rewriting existing code from scripts.

VR Combination and Permutation

Feb - May 2018

- Collaborated in a team of three to develop a VR research project that tests the player's understanding of math concepts in an escape-room environment.
- Implemented environment interactions, audio, and player controls using SteamVR and VRTK.

SKILLS

- **Languages:** Java (proficient), C# (proficient), HTML (proficient), CSS (proficient), Javascript (familiar), Python (familiar), C++ (familiar), MySQL (familiar), Ruby (familiar)
- **Tools:** Unity, Visual Studio, Eclipse, NetBeans, GitHub Desktop, PuTTY, Android Studio, Microsoft Office